Appendix F
Mid-Year Report

May 1, 1996

Information Management (IM) Resource

This report covers progress made on selected measures during the first half of FY96 in each information management program element.

Strategic and Tactical Planning

Performance Measure	Progress/Measurement
• Implement an ongoing process of planning that is consistent with the Laboratory's strategic plan.	A schematic of the Information Management (IM) Planning Process is shown in Fig.1. The IM Planning Policy was finalized in January 1996. Figure 2 contains the specific planning calendar for FY96. Figure 3 demonstrates that the planning schedule has been met through March 31, 1996. IM functional areas have been involved in continuous quality improvement initiatives for the past three years. Figure 4 lists scheduled activities to incorporate the Laboratory's near-term objectives for business process management into the ongoing IM planning process. We continue to develop and improve electronic tools to support the IM planning process. A Joint Applications Design meeting was held in late November 1995 and resulted in the conceptual design of an integrated tool suite for this purpose, as shown in Fig. 5. Work has proceeded on the development of the Executive Information Systems (EIS) module with a working pilot of a budgeting tool linked to the Laboratory's accounting system and financial and personnel data warehouses. The budgeting module will be used during the current FY97 planning cycle. During the summer and into next fiscal year, the EIS will be enhanced and expanded, and the Project Management Overlay module will be fully developed. A suite of business management tools is being developed. We have outlined the management structure in effect for the project and constructed a work breakdown structure at Level 3.0. (Figures are attached to the end of this report.)

Telecommunications

Performance Measure	Progress/Measurements
• Discussion with our customers of current problems and anticipated future needs is integrated into our normal way of doing business.	Externals team has quarterly meetings with DNA. Telephone Operations and Billing teams developed a customer survey. Results are being reviewed, and assignments will derive from the results. Meetings with network managers user's group are held monthly to discuss issues or present technical topics. The LANLnet project is governed by a team of customers that resolves policy issues and sets high-level direction for the project. USWest (contractor for telephone services) holds quarterly operation review meetings with CIC-4 staff and presents performance metrics on equipment operation and service levels.
• With customer input, develop specific measures of customer satisfaction with our products and services, and integrate means of tracking those measures into our normal business practices.	Current metrics include: number of service and repair orders completed per month, statistics on repair orders by type of trouble, USWest end-user satisfaction survey results, AT&T 5ESS performance per Bellcore BR 235-020-005. Additional metrics will be developed based on the results of the customer survey mentioned above.
• Develop, follow, and meet a budget that clearly supports the cost of all services and products.	FY95 budget targets were met. FY96 telecommunications budget was submitted at $26.7M, revised to $24.5M, including fully supported rates for all offered services.
• Formal systems exist for improving the quality of our services and staff awareness of quality processes.	About 75 CIC-4 members have been formally trained in quality processes through the Quest 2000 program. Formal CQI processes are established. There are four CIC-4 process improvement teams: Network Status Prediction Team STOPIT has 3 sub-teams Service Order Initiation Process Service Order Billing Process Service Order/USWest Process CWR/LAN Team COMSEC Team

Software Management

Performance Measure	Progress/Measurements
• Software products are identified for improvement and improvement processes are begun.	Time and Effort (T&E) application delivered on the IBM mainframe will be augmented with a client/server version with a graphical user interface. The client/server release of T&E was delivered in March. The Financial Reporting System is lacking forecasting and allocation modules; these will be added to the system. A new version of the Data Warehouse has just been released. It makes it much easier to increase functionality and data to the application. The CIC business planning tool being released at the end of April will pilot the forecasting functionality before being released Laboratory-wide. The allocation module has been delayed. Based on customer input, personnel and facility management information has taken precedence over allocations.
• At least 900 additional LANLnet connections are made in FY96.	As of March 30, 273 new connections are complete and another 355 are in the queue. The requests for new connections are slow in coming. However, the requests for re-engineering existing connections is higher than anticipated. The original estimate was 500. We currently have completed 351, and another 642 are in the queue. The LANLnet project leader is analyzing the customer survey that was just returned to determine the reason for the shift from new connections to re-engineering.
• The acquisition of a new Human Resources Information System is piloted through the information system process developed by customers and CIC. The process is evaluated and modified accordingly.	The pilot is ongoing and already the Applications focus team is augmenting the process to avoid redundant efforts.

Management and Acquisition of IM Resources

Performance Measure	Progress/Measurements
• Address every major item of equipment (MIE) subsequent to submittal of Long-Range Plan (target = 100%) and meet milestones for MIEs (target = 100%).	An Implementation Plan for the Supercomputer '96 MIE, identified in the FY 1996-2000 Long-Range Plan, was written and reviewed with DOE. This plan addressed the need for supercomputer upgrades, Scalable Multi-Processor computer systems, mass storage, and network upgrades totaling $12.3M. A project manager responsible for planning and setting specific objectives pertaining to the MIE was appointed. A J932 Cray Supercomputer (16 CPUs and 8,192 MB Memory) was delivered and accepted before the end of the calendar year. A lease-to-ownership (LTO) plan was negotiated with Cray for about $2.3M at an interest rate significantly lower than current market rates and a favorable payment schedule. This LTO plan allowed us to acquire all the equipment necessary to meet the current programmatic requirements at a cost commensurate with a direct purchase.
• Implement an analysis of benefits and costs (ABC) for MIEs (target = 100%).	In FY96, an ABC was developed and used for the Supercomputer ‘96 line item. The ABC showed that purchasing a J932 Cray Supercomputer was the most cost-effective alternative. The J932 is needed to provide the additional capacity and capability necessary to execute large two-dimensional nuclear weapon modeling applications and to significantly lower the operational costs associated with the Laboratory’s Central Computing Facility. The benefits identified through the ABC are shown in Table I.

Management and Acquisition of IM Resources (continued)

Performance Measure	Progress/Measurements
• LANL customer satisfaction is based on regular survey and direct customer feedback (target = 90%).	We are in the process of developing a formal mechanism for obtaining feedback from our customers. We are developing a customer survey, which we plan to distribute by May 1996. Employees attended a customer service seminar. We also continue to interact with our customers on a daily basis to discuss current problems and anticipated equipment needs.
• Partner with other sites, management, and operating contractors, etc., to reduce costs and leverage existing capabilities (target = 100% where it will reduce costs or leverage existing capabilities).	The Accelerated Strategic Computing Initiative is a good example of partnering with other sites. Working with Lawrence Livermore National Laboratory and Sandia National Laboratories, we developed the final version of the request for proposal and sent it out to vendors for comment. The degree of collaboration on this project is unprecedented in scope and may well set the standard for similar projects in the future.

TABLE I: List of Benefits of Purchasing a J932 Identified in the Cost-Benefit Analysis

- Reduced costs - savings per year: Maintenance, $979,980;
- Reduced costs - savings per year: Power, $558,468;
- Efficiency: the new system will run more efficiently, can run much larger problems, and will support future growth;
- Manageability: no new personnel are needed to manage the system and no special training of current system manager is needed;
- Performance: the new J932/16-8192 system provides up to 5.3 times the memory capacity of the current system;
- Portability: software from the old system is easily portable and compatible with the proposed system;
- Reliability: the projected mean time to failure is better than the current system;
- Upgradability: the proposed system can readily be upgraded;
- Net present value : the 8-year overall NPV is $3,339,297; and
- Benefit-to-cost ratio: the 8-year ratio shows a benefit of $1.59 for every dollar spent.

Unclassified Computer Security

LANL's FSS Division is proceeding with the self-assessment and gathering metrics. Results should be available by late July for our end-of-year report.

Records Management

Performance Measure	Progress/Measurements
• Complete the records inventory in LANL organizations by the end of FY99. As part of this activity, the necessary training is in place and the inventory maintenance process is established and functioning. Measurement of the number of employees contacted and the volume of records inventoried will be reported.	Records inventories have been completed in NMT and CST divisions (Groups 5, 7, 13, 14, and 27) and are in process in ESH and BUS Divisions. Record volume inventoried: 8784 cu. ft. No. of record series found: 547 No. of employees interviewed: 164 No. of employees in organizations: 676
• Deploy the IRM solutions within CIC-10. Transfer existing records management data from CARLA to IRM by the end of FY96.	The unclassified tool is completed, the classified database has been developed and is ready for deployment. Software is scheduled to be installed in July 1996..
• Continue to adapt IRM solutions and deploy to other LANL organizations. Most LANL organizations are to have IRM solutions installed by the end of FY99. Measurement will be the number of IRM solutions installed in LANL organizations and the number of licenses issued for the products.	IRM installations have been completed in NMT Division and five groups within CST; they are in process in ESH and BUS.
• Conduct an initial benchmarking survey of CIC-10 activities by the end of FY96. Establish an ongoing benchmarking program beginning in FY97.	Our questionnaire was released the week of June 10, 1996, to five outside organizations.
• Complete a self-assessment of records management operations by the end of FY96.	The records management program upper-level commitments have been identified and mapped to LANL procedures and standards.

Scientific and Technical Information

In addition to the progress noted for the following measures, CIC-1 completed a customer survey of its major products and services, and the Research Library (CIC-14) continues its ongoing collection of feedback from customers and board members.

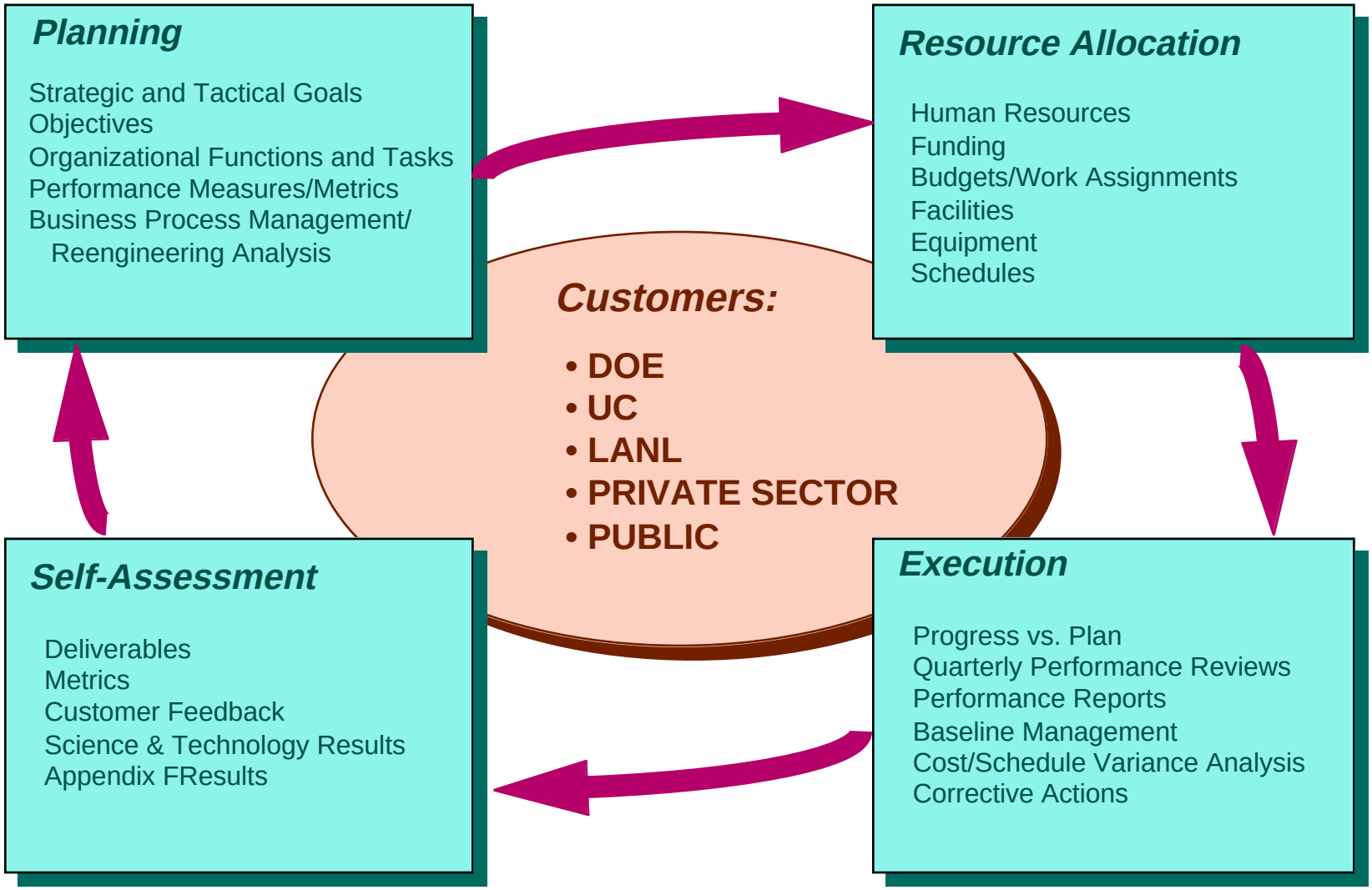
Performance Measure	**Progress/Measurements**
• The LANL Research Library's on-line catalog will provide bibliographic access for unclassified LA-series reports within an average of 40 working days after receipt in the Library.	Actual time is less than 5 days.
• CIC-1 and CIC-14 will publish on the Internet 50% of all unclassified, unlimited distribution LA-series reports after receiving permission from the authors, FSS-16, and the intellectual property reviewers.	Current average is about 70%.
• 100% of all LA-series reports are edited at the Level 1 standards stipulated in the LANL *Publications Manual.*.	We are on target at 100%.
• The average turnaround time for an FSS-16 classification review of a 10-page document does not exceed 3 working days.	Current average is 2.6 working days.

Printing and Reproduction

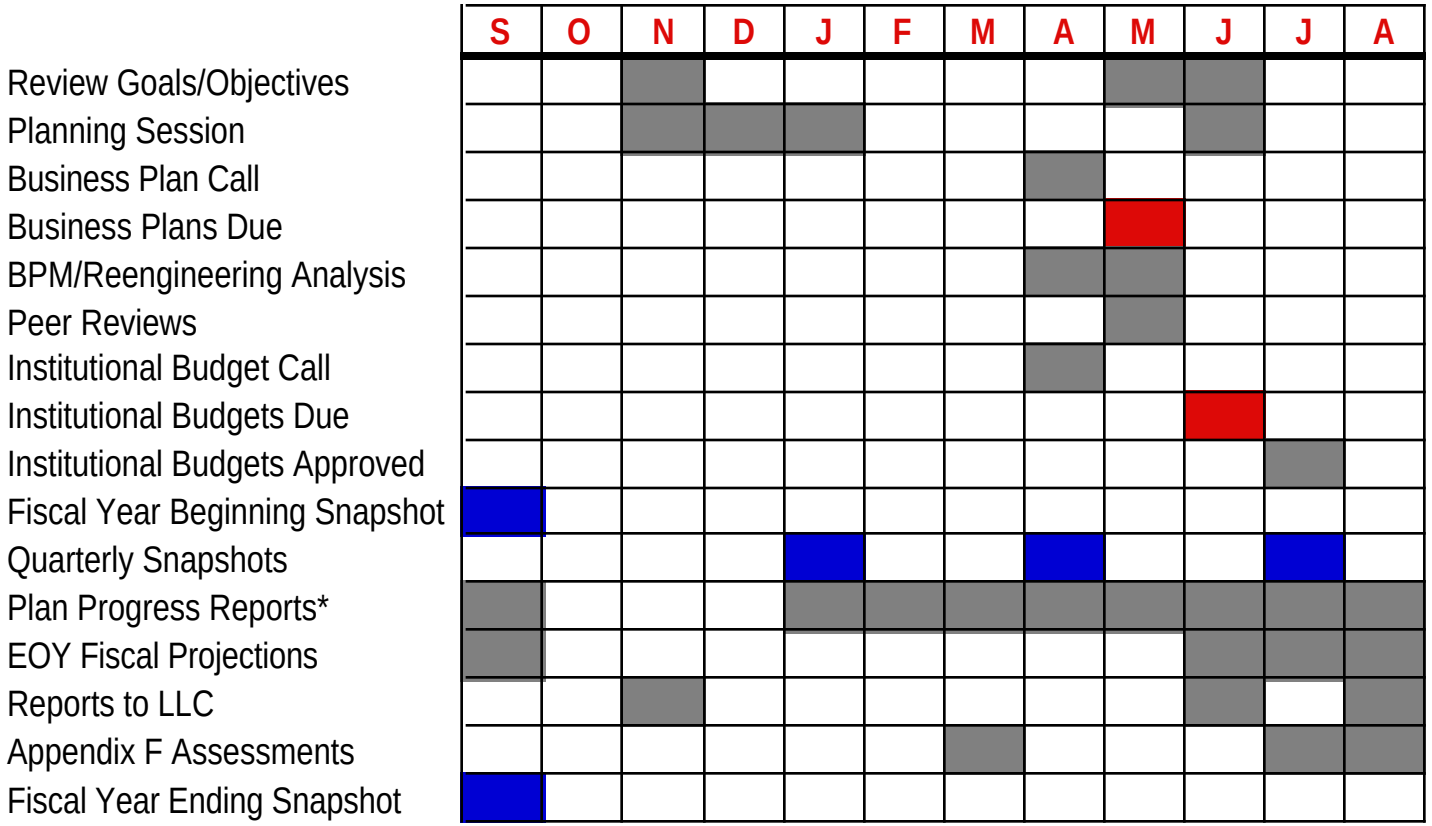
Performance Measure	Progress/Measurements
• A Laboratory-wide self-assessment program plan for printing and reproduction is created.	Each year CIC-17 prepares a U.S. Joint Committee on Printing report, which is in essence a Lab-wide "self-assessment" for printing and reproduction. In addition, CIC-17 initiated and participates in a Lab-wide Duplicating Services team, studying the costs of duplicating throughout the Lab. The team is also investigating a cost-per-copy contract with vendors, who would potentially become responsible for all duplicating machines, maintenance, and supplies.
• Benchmark our operations' costs and compare with external printing and reproduction operations to establish a baseline.	Group Leader and Team Leader traveled to another DOE installation to obtain benchmarking price data and are in the process of comparing cost data.
• Less than 15% of jobs will be reworked.	We are developing metrics to measure (1) internally- vs externally-caused need for rework; (2) the number of reworked jobs; and (3) the number of reworked jobs that nevertheless meet the original deadlines regardless of rework cause.
• Interview a random selection of our customers monthly to evaluate whether the customer received the desired product quality with an initial tentative goal of having 80% of customers comment positively on the quality of the product they received.	Draft survey or interview sheet has been completed to measure(1) product quality, (2) staff knowledge, (3) staff professionalism, (4) deadlines met, (5) relative importance to the customer of quality, timeliness, and costs. Method(s) of implementing the survey in interview format are in the planning stage.

Printing and Reproduction (continued)

Performance Measure	Progress/Measurements
• Establish a baseline for the number of job order changes handled within the original requested deadline, with an initial tentative goal of meeting 75–80% of these job order changes within the original deadlines.	We are developing metrics to measure (1) the number of job order changes and (2) the number of changed jobs that nevertheless meet the original deadlines.

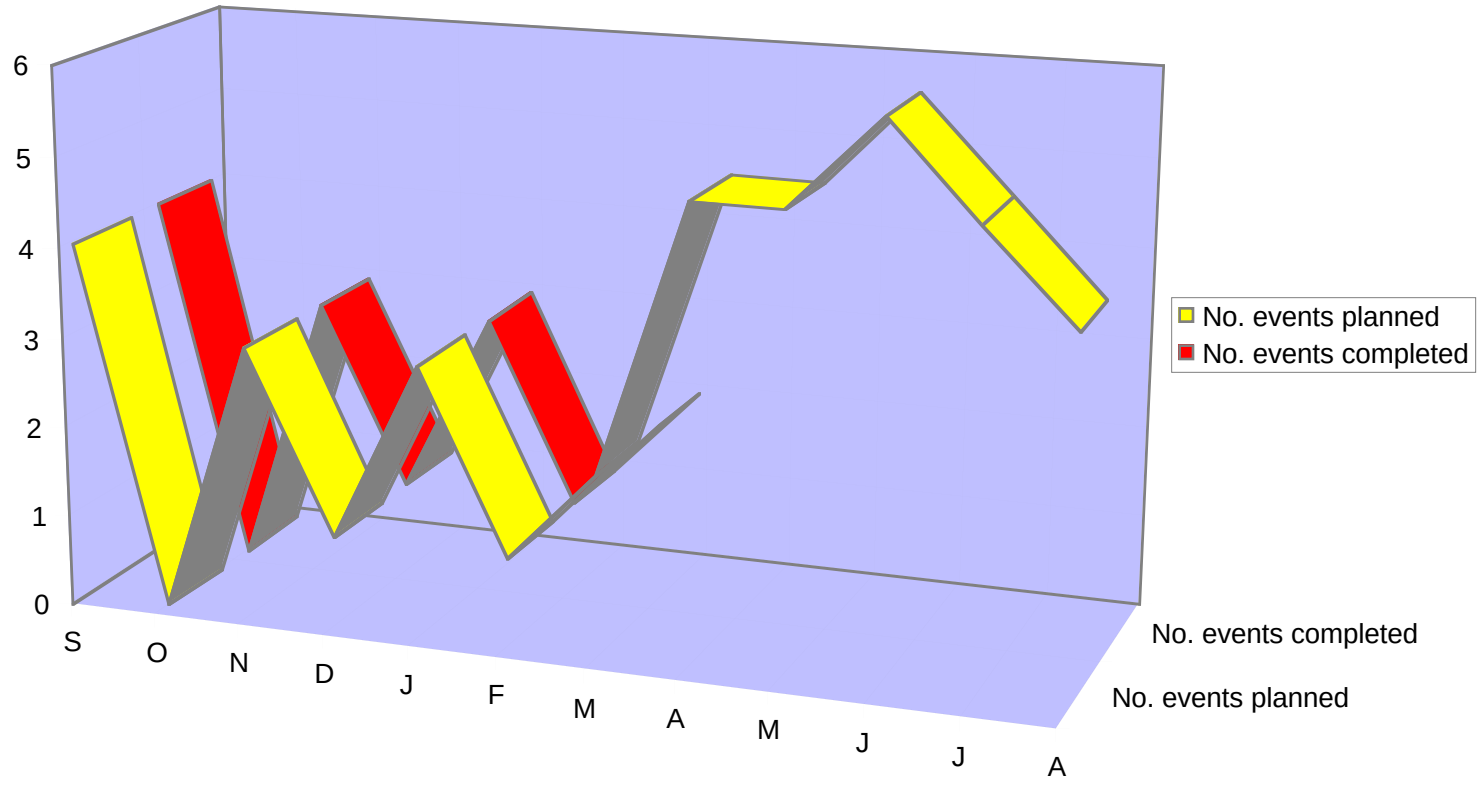

Planning
Strategic and Tactical Goals
Objectives
Organizational Functions and Tasks
Performance Measures/Metrics
Business Process Management/
Reengineering Analysis
Resource Allocation
Human Resources
Funding
Budgets/Work Assignments
Facilities
Equipment
Schedules
Customers:
• DOE
• UC
• LANL
• PRIVATE SECTOR
• PUBLIC
Self-Assessment
Deliverables
Metrics
Customer Feedback
Science & Technology Results
Appendix FResults
Execution
Progress vs. Plan
Quarterly Performance Reviews
Performance Reports
Baseline Management
Cost/Schedule Variance Analysis
Corrective Actions

FY96 CIC Planning Schedule



*One-third of Division organizational components report each month.

CIC Business Planning Events Metrics



Business Process Management in CIC Division

Schedule

4/15/96	BUS issues Institutional Budget Call with preliminary budget targets
4/24/96	WPP discusses targets with Division Directors (through 4/26)
4/26/96	QP provides customer and provider feedback data charts
5/1/96	Institutional budget targets issued
5/3/96	Hassan/team brief Leaders; process improvement and/or reengineering analysis begins
6/3/96	Institutional budgets due to BUS; reengineering analysis results due to QP
7/1/96	Final budget targets distributed
7/1/96	Process improvement/reengineering activities begin
9/30/97	Activities completed; targets met

CIC Business Management Tool Conceptual Design